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Hideo Matsunaga

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RECORD OF ORAL HEARING  
UNITED STATES PATENT AND TRADEMARK OFFICE  
  
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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* HIDEO MATSUNAGA and MASAOMI HIRUTA  
\_\_\_\_\_

Appeal 2009-014954  
Application 10/802,874  
Technology Center 3700  
\_\_\_\_\_

Oral Hearing Held: Tuesday, January 10, 2012  
\_\_\_\_\_

Before JOHN C. KERINS, STEFAN STAICOVICI and MICHAEL C.  
ASTORINO, *Administrative Patent Judges*

APPEARANCES:  
  
ON BEHALF OF THE APPELLANTS:  
  
S. STUART LEE, ESQUIRE  
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1           The above-entitled matter came on for hearing on Tuesday,  
2   January 10, 2012, commencing at 1:59 p.m., at the U.S. Patent and  
3   Trademark Office, 600 Dulany Street, 9th Floor, Hearing Room A,  
4   Alexandria, Virginia, before Kevin Carr, notary public.

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8           JUDGE KERINS: Mr. Lee, would you happen to have a  
9   business card you can give to our court reporter?

10          MR. LEE: I think I had a client dinner a couple of days ago, and  
11   I gave all my business cards from my wallet.

12          JUDGE KERINS: We'll make sure before you leave that he has  
13   whatever information he needs.

14          MR. LEE: Sure. And before we start, is it okay if I provide the  
15   reporter with a list of terms --

16          JUDGE KERINS: Sure.

17          MR. LEE: -- that I'll be using during this hearing?

18          JUDGE KERINS: Mr. Lee, we have reviewed the file in the  
19   case and are generally familiar with the issues. We look forward to hearing  
20   your arguments for patentability.

21          MR. LEE: Okay. May I start?

22          JUDGE KERINS: Yes.

23          MR. LEE: May it please the board, my name is S. Stuart Lee.  
24   I'm here on behalf of the appellant, Bridgestone Sports Company, Limited,  
25   and I'd just like to highlight a few points here during the short time we have,

1 but before I discuss the few points, I'd like to provide you with a summary of  
2 the invention, a brief summary.

3 And the invention relates to a golf club, and as many of you may  
4 know, there is a shaft, and at the end of the shaft is a club head, and the  
5 portion of the club head that meets the shaft is the hosel, and the bottom of  
6 the golf club head is the sole, and the top of the golf club head is the crown,  
7 and these terms are terms that are used in the claims.

8 And among the inventive aspects, there are three that I'd like to  
9 mention.

10 One is the intersection angle between a side portion and the  
11 crown of the golf club.

12 You may have it in front of you, but if I may direct your  
13 attentions to Figure 1-B of our specification, it shows a cross section of a golf  
14 club head, and in this exemplary embodiment, you know, we have an upper  
15 side portion with reference number 12 and the crown, which is identified  
16 with reference number 11, and as you can see, there is an intersection angle  
17 denoted with beta, and the inventive aspect of this is that the intersection  
18 angle is larger than 90 degrees.

19 The second aspect of the invention relates to the titanium alloy  
20 that's used for a couple of portions of the club head, and specifically, the use  
21 of a specific titanium alloy for the sole portion and the side portion of the  
22 golf club head.

23 And lastly, another inventive aspect is using certain materials  
24 with certain physical characteristics for the upper side portion and the lower  
25 side portion.

1           In the first set of claims -- I'll mention Claim 1 as an example.  
2   Claim 1 recites portions of a golf club head, and here we have a face, sole,  
3   side, and crown, and the "wherein" clause, among other recitations, recites  
4   that the intersection angle between the crown and the side is larger -- larger  
5   than 90 degrees, and in the rejection of this claim, the Examiner cites  
6   Tsuchiya in view of several secondary references.

7           Specifically, the Examiner cites Kusumoto, Murphy, Dekura,  
8   and Imai as allegedly disclosing the claimed intersection angle, but you  
9   know, we have carefully reviewed these references, and it is our belief that  
10   there is no express disclosure of any intersection angle larger than 90 degrees  
11   or any discussion of the claimed intersection angle.

12           And we would note that the Federal Circuit has held, in  
13   Hockerson-Halberstadt versus Avia that it is well established that patent  
14   drawings do not define the precise portions of the elements and may not be  
15   relied on to show particular sizes if the specification is completely silent on  
16   this issue.

17           JUDGE KERINS: Counsel, is the Examiner relying on the  
18   secondary references for specific sizes?

19           MR. LEE: Yes. The Examiner is referring to -- refer to specific  
20   figures of Kusumoto, Murphy, Dekura, and Imai as allegedly disclosing the  
21   claimed intersection angle that is larger than 90 degrees.

22           JUDGE KERINS: That's not a size, Counsel.

23           MR. LEE: I'm sorry?

24           JUDGE KERINS: That's not a size, is it?

1                   MR. LEE: Well, I think if you -- I think it's fair to say the size  
2 of an angle -- angle -- size is used in the context of dimensional values, and I  
3 think it's fair to say that an angle is also a dimensional value.

4                   The references that the Examiner cites makes no explicit  
5 mention of the intersection angle, and we would even submit that Kusumoto,  
6 Murphy, Dekura, and Imai are actually directed to different aspects of the  
7 golf club head. Not only do they provide no discussion or mention of the  
8 intersection angle, but rather, Kusumoto, Dekura, and Murphy -- they all  
9 relate to the hosel interface, how the shaft interfaces with the hosel portion of  
10 the golf club head.

11                  JUDGE KERINS: Of what significance is that?

12                  MR. LEE: The significance is that, assuming arguendo that  
13 these references did talk about the angle at which the crown intersected with  
14 a side portion and perhaps they didn't provide any specific angle but provided  
15 some discussion of this intersection, you know, that is something that, you  
16 know, if disclosed in the reference, perhaps an argument can be made that it  
17 may have been obvious, that the claimed angle was obvious, given the  
18 discussions in the prior art, but the prior art -- the cited references, you know,  
19 do not talk about the intersection angle but is directed to some other portion  
20 of the golf club.

21                  So, the point is that -- simply that these references are directed  
22 to different portions of the golf club head, and one skilled in the art, when  
23 they will look at these references, would not look at the intersection angle but  
24 would be looking at the hosel, for example, or for Imai, they would be  
25 looking at the protrusions at the bottom of the sole.

1                   And you know, we would also -- I would also submit that this  
2   Hockerson-Halberstadt is not a lone case out there. There are other Federal  
3   Circuit cases that has cited in agreement with Hockerson-Halberstadt that --  
4   for example, Nystrom versus Trex is another -- is a more recent Federal  
5   Circuit case where it was held that patent drawings do not define the precise  
6   proportions of the elements.

7                   JUDGE KERINS: Counsel, here, aren't we just looking for an  
8   angle larger than 90 degrees? Is that -- is that very precise?

9                   MR. LEE: It would be precise to the extent that the claim  
10   recites angle larger than 90 degrees.

11                  JUDGE KERINS: That covers 90 degrees.

12                  MR. LEE: Well, I would submit that the claim recitation says  
13   side portion is larger than 90 degrees, and you know, it's precise in that, you  
14   know, the claim talks about the angle being, you know, larger than 90  
15   degrees.

16                  JUDGE KERINS: But Counsel, isn't that plainly shown in these  
17   four secondary references?

18                  MR. LEE: Well, the drawings in Kusumoto, Murphy, and  
19   Dekura do show some -- the golf club head, but there is no indication that  
20   these proportions are drawn to scale.

21                  JUDGE KERINS: On that point, Counsel, what difference does  
22   it make if they're drawn to scale?

23                  MR. LEE: That's one of the -- in the Hockerson-Halberstadt and  
24   its progeny, they all mention about how if there is no mention of the drawing

1 as being drawn to scale, then, you know, that's -- then, you know, one skilled  
2 in the art would not look to these drawings as disclosing specific sizes.

3 JUDGE KERINS: And that goes to my earlier question.  
4 Regardless as to whether these are drawn to scale, that angle would --  
5 whatever scale they're drawn to, that angle would remain the same regardless  
6 of the scale it's drawn to.

7 MR. LEE: I guess there becomes a question of -- assuming -- I  
8 think that would be the case if the entire -- all portions of the drawing is -- is  
9 drawn to a -- the same scale. I mean, for all we know, certain portions could  
10 be drawn to one scale, another portion of the drawing in these references  
11 could be drawn to another scale.

12 Perhaps they want to place some more emphasis on certain  
13 aspects of the drawing.

14 JUDGE KERINS: So, is it your position that whatever is not the  
15 focus of the reference itself cannot be assumed to be accurately depicted?

16 MR. LEE: Yes. I think, looking at the Federal Circuit cases, I  
17 think that's the logical conclusion, that, you know, absent some kind of a  
18 discussion of these other portions of the golf club head, absent any mention  
19 of the drawing being at a particular scale, I think -- it seems that it's  
20 unreasonable to, you know, look at these other portions, unmentioned  
21 portions in a specification, in a reference, for certain teachings.

22 JUDGE KERINS: Is there anything in the drawings of the  
23 secondary references that suggests that less precision or less detail is being  
24 used on parts of the club head than others?



1                   MR. LEE: I'm not aware of such mention in the prior art, in the  
2 references we have. I'd be more than glad to look at these references and  
3 provide a supplemental brief.

4                   JUDGE KERINS: I was referring more to the drawings  
5 themselves. Is there anything in the drawings that would suggest to a person  
6 skilled in the art that part of the club head is drawn with a certain degree of  
7 precision and part of it is drawn with a lack of precision in the drawings  
8 themselves?

9                   MR. LEE: I'm afraid I can't comment on that. I think one thing  
10 I can say -- I can't provide you a direct answer to that, but what I can say is  
11 that there's nothing in these references that states that these drawings are  
12 prepared to scale.

13                   So, for those reasons, you know, we would submit that Claim 1 -  
14 - the rejection of Claim 1 should be reversed, and the second claim that I  
15 would like to discuss is Claim 14, and this Claim 14 recites that the sole  
16 portion and the side portion are made of a particular titanium alloy, and the  
17 Examiner cites the Tsuchiya reference as allegedly disclosing this claimed  
18 feature, and the Examiner cites column 9, line 11, through column 10, line 2,  
19 of Tsuchiya, but that portion of Tsuchiya actually does -- makes no mention  
20 of the sole and the side portion being made of a particular titanium alloy.  
21 Rather, the -- Tsuchiya discloses the face being made of a particular titanium  
22 alloy.

23                   Thirdly, we have Claim 16 --

24                   JUDGE KERINS: Mr. Lee, if we could go back to Claim 14 for  
25 a second --

1 MR. LEE: Sure.

2 JUDGE KERINS: In the Examiner's answer, the Examiner also  
3 cites to column 6, line 64, through column 7, line 27, and also column 8,  
4 lines 1 to 15, in Tsuchiya. Those don't appear to be directed strictly to the  
5 material that the face of the club would be made of. Possibly the most  
6 succinct disclosure would be column 8, lines 1 through 6, which appear to  
7 show that that titanium alloy is being used for all of the sections of the club  
8 head.

9 MR. LEE: What I do not see there is a mention of the sole  
10 portion being thicker than the lower side portion. Not only does the claim  
11 mention the use of a particular titanium alloy but also mentions that the sole  
12 portion made of this titanium alloy is thicker than the lower side portion.

13 JUDGE KERINS: Was that argued in your brief, Mr. Lee?

14 MR. LEE: I believe that may not have been submitted in the  
15 briefs, but we did -- the brief does mention that the -- that Claim 14 is  
16 patentable because of the sole and the side portions being made of a titanium  
17 alloy and -- and are molded by casting and wherein the sole portion is thicker  
18 than the lower side portion in combination with other elements of the claim.  
19 That is in the brief, Your Honor.

20 And lastly, we have Claim 16, which touches on the third  
21 inventive aspect of this application, and this aspect deals with, again, a golf  
22 club head, and as with Claim 1, we have a face, sole, and a crown and a  
23 hosel.

24 In this claim, we also have a side portion, and the side portion  
25 includes an upper side portion and a lower side portion. The specific

1 language is a side portion that includes an upper side portion corresponding  
2 to an upper half portion of the side portion and the lower side portion  
3 corresponding to a lower half portion of the side portion.

4 And it is our position that the Examiner has not pointed out, nor  
5 have we found anything in the references, that would disclose -- that  
6 discloses this claimed feature, where -- the claimed "wherein" feature where  
7 the upper side portion has a Young's modulus that is lower than the lower  
8 side portion and the Hosel portion.

9 The Examiner cites Tsuchida and Hoshi as allegedly disclosing  
10 this "wherein" -- claimed "wherein" recitation, and the -- specifically, in  
11 Tsuchida, the Examiner points out the crown portion being made of a first  
12 material with a modulus of 200 gigapascals, with the remainder of the shell  
13 being made of a material with a modulus in a range between 150 and 250  
14 gigapascals.

15 But we would submit that Claim 16, the "wherein" clause  
16 doesn't compare the -- does not provide a relative comparison of the Young's  
17 modulus of the crown versus a side portion. Rather, Claim 16 mentions the  
18 Young's modulus of the upper side portion that is lower than the Young's  
19 modulus of the lower side portion and the hosel portion.

20 And this is the same for the Hoshi reference. In Hoshi  
21 reference, like in Tsuchida, the crown is disclosed as having a particular  
22 modulus, and that this modulus is different from at least the sole portion, but  
23 again, Claim 16 does not compare the modulus of the crown with the  
24 modulus of at least the sole portion but, rather, Claim 16 specifically recites

1 the Young's modulus for the upper side portion with respect to the lower side  
2 portion and the hosel portion.

3 So, for these reasons, you know, we would submit that Claim 16  
4 is patentable and that the Examiner's rejection of Claims 1 through 20 should  
5 be reversed.

6 That's all I have unless the board has any questions.

7 JUDGE KERINS: Judge Astorino?

8 JUDGE ASTORINO: No questions.

9 JUDGE KERINS: Judge Staicovici?

10 JUDGE STAICOVICI: One last question. Going back to the  
11 limitation of the angle being greater than 90 degrees --

12 MR. LEE: Yes.

13 JUDGE STAICOVICI: Are you saying that a person of  
14 ordinary skill in the art cannot tell if an angle is greater than 90 when he  
15 doesn't have an upper limit?

16 MR. LEE: I think, you know, one skilled in the art may or may  
17 not be able to tell whether some feature is -- depicted feature is greater or --

18 JUDGE STAICOVICI: Specifically an angle.

19 MR. LEE: I'm sorry?

20 JUDGE STAICOVICI: We're discussing an angle right now.

21 MR. LEE: Right. The angle may be greater -- I guess it  
22 depends on the individual whether the individual is able to determine  
23 whether some feature is greater than 90 degrees, but I think that the  
24 references of record deal with features of the golf club head that don't bear to  
25 the intersection angle as claimed.

1                   So, one skilled in the art, when they would look at Kusumoto,  
2   Dekura, Imai, and Murphy, they would be looking at either the hosel portion  
3   or perhaps the bottom of the sole in the case of Imai.

4                   JUDGE KERINS: Thank you, Mr. Lee. We'll take the case  
5   under advisement.

6                   MR. LEE: Thank you.

7                   (Whereupon, at 2:22 p.m., the proceedings were concluded.)

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